Full metal jacket

B&W's pretty little M-1 satellite makes a stylish partner for the massive 'medicine ball' PV1 sub

PRODUCT B&W M-1 and PV1

TYPE Satellite and subwoofer speaker system

PRICE (M-1) £125 each, (PV-1) £950

KEY FEATURES (M-1) Size (WxHxD): 11x21x15 cm ● Weight: 2.7kg ● Flexible mounting system ● Cast alloy enclosure ● 25mm tube-loaded tweeter ● 100mm main driver ● (PV1) Size (WxHxD): 29x34x35 cm ● Weight: 20.5kg ● Spherical cast alloy enclosure ● 2x200mm drivers ● 500W power amplifier

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Sound reproduction has gone through big changes in recent years. The advent of surround sound music and movie sources are changing the hi-fi landscape dramatically. *Hi-Fi Choice* continues to focus firmly on the reproduction of music in stereo, but it would be myopic to ignore multichannel developments entirely, especially given the development of SACD and DVD-Audio.

Because of the space required to house a home cinema system, the 5.1 sub/sat combination has become a core multichannel market stereotype. Five small and easily sited satellite speakers cover the mid and top, and provide the surround effects, while the low bass goes to a subwoofer that can be tucked discreetly out of the way. This sub/sat approach might particularly suit multichannel systems, but it's by no means a new idea, and is equally valid for stereo. *HFC* tested a batch of three-box stereo sub/sat systems way back in 1992; that's practically prehistoric in home cinema terms.

B&W obviously expects to sell most of its new M-1 satellites as part of 5.1 systems, alongside one of three alternative subwoofers, but the '2.1' or 'three-box' stereo option is clearly an integral part of the scenario, too. The press release claims the M-1 speakers front "an audiophile sub/sat system", and full discussion of the stereo options is found in the very thorough manual.

For the purposes of this review, the M-1 satellites were underpinned by the excellent PV1 subwoofer, which we reviewed in full in *HFC* 259. In fact, two PV1s were drafted in for some tests, because physically separating the bass sources gives more even room-drive. That's really a separate issue. The superior performance of the PV1 is already a given, and the main purpose here is to evaluate the little M-1 satellite, and see how well it lives up to its 'audiophile' billing.

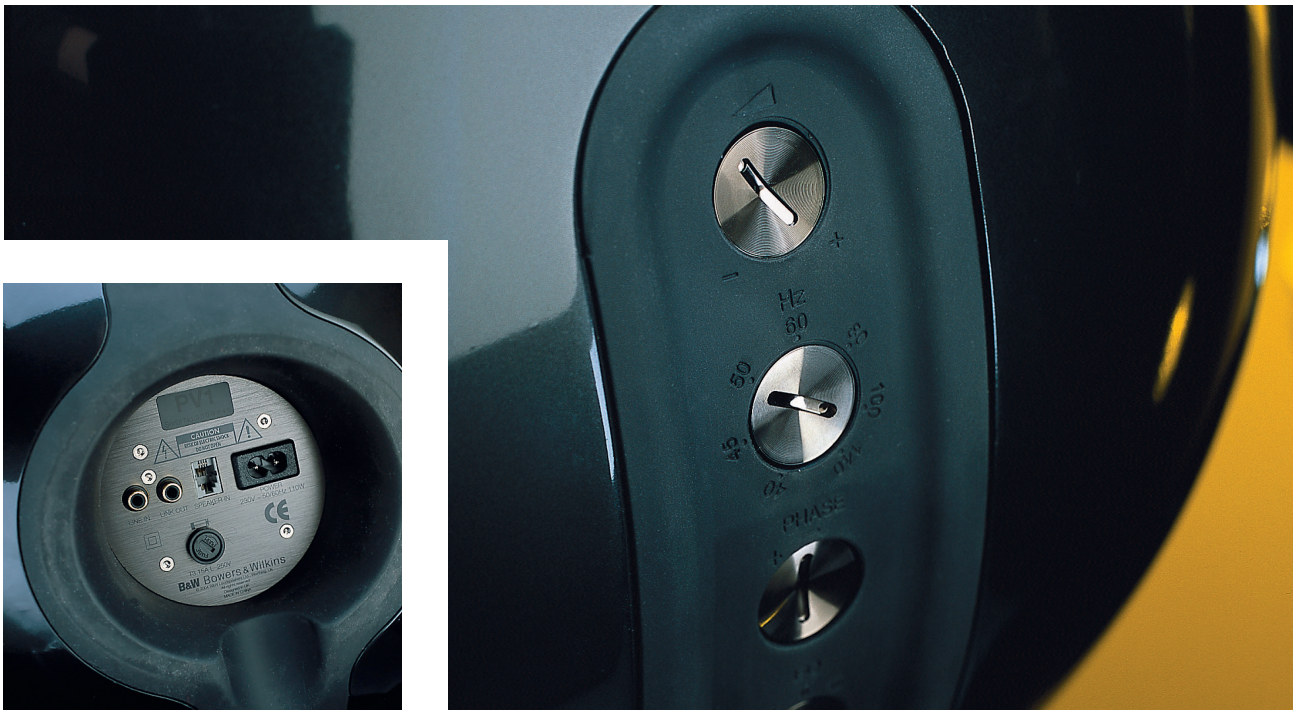
'Son of Solid' is the first reaction on unpacking this system, though that's largely because both the M-1 and the previous Solid designs feature an integral swivelling stand. In fact, this new model is not only considerably smaller and more flexible, it also, ironically, feels a whole lot more, er, solid. Picking one up, its considerable 2.7kg weight comes as quite a surprise, since the enclosure is probably no more than a litre or so in total volume (think Tetrapack). Back and sides are a single alloy casting, while the baffle, top and base is made from tough ABS plastic. And if the alloy itself is inherently very stiff, rigidity is further enhanced by the curvaceous shape.

How small can you go? That's the key question the designer of any satellite speaker must confront. Make it too big and no-one will buy it; make it too small and you can kiss goodbye to all hi-fi pretensions. The M-1 looks a little larger than many of its rivals, which should be a performance plus, but is still small enough to look cute. Priced at £125 per speaker, it's hardly the cheapest satellite around, but the serious engineering content and clever design justify the asking price.

A two-way port-loaded design, it combines a 100mm main driver that has an advanced 80mm fibreglass cone, with a 25mm metal dome tube-loaded tweeter. The crossover is deliberately minimalist, and the mounting arrangements are clever and flexible; the unit may be used horizontally or vertically on its stand/base, or fitted to a wall bracket or a slim free-standing pillar. Cleverly, the stand also doubles as a tiny speaker terminal block. The M-1 is available in black, silver or white.

SOUND QUALITY

The satellites naturally have limited bass extension, though they work well enough down to around 140Hz. This matches seamlessly to the PV1, which may be fed either via its (unfiltered) line-level phono input, or using the speaker-level connector with the filter set to maximum bandwidth (150Hz).



There's considerable scope for making subtle adjustments to the tonal balance by moving the subwoofer and satellites around and/or blocking the M-1 ports. Under our conditions, best results for the M-1 were found with the ports blocked and placed on stands clear of walls; the PV1 likewise works best away from nearby walls, to avoid excessive mid-bass.

The net result, under our far-field conditions, is a quite superbly well-balanced in-room frequency response. It's not entirely smooth and free from character, though the variations remain very well controlled. There are slight midband dips at 1.3kHz and 3.5kHz, which may well account for the nasality that is just audible with speech. The treble is a little strong, relatively speaking, with a distinct peak at around 12kHz, and this is audible as a degree of top end emphasis, though happily it's also quite sweet and delicate.

The small main driver and enclosure inevitably lead to a correspondingly 'small' measured performance. On our measure, sensitivity achieves an unusually low 84dB, just 1dB below that claimed, yet it isn't particularly easy to drive, with an impedance between four and six ohms through most of the bass and midband.

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Initially, the sub/sat combo showed rather obvious dynamic range constraints, as well as noticeable midband coloration and congestion. However, after a little acclimatisation the strengths of this combo started to come through, unlike the performance of many sub/sat systems. One seemed to adjust to its limitations easily, and if the end result falls well short of the best in full-sized loudspeakers, that's hardly surprising given the modest price and size of the M-1 satellites, and they certainly deserve commendation for an essentially vice-free performance.

Unsurprisingly, the PV1 definitely outperforms the M-1, delivering clean, crisp bass and driving along any techno or hip-hop beats with appropriate enthusiasm and punch, plus considerable weight and authority. And the sound as a whole is beautifully neutral and natural, providing a very well-focused stereo soundstage, albeit with some lack of depth resolution and perspectives.

It might be difficult to endorse the M-1's audiophile pretensions with real enthusiasm, but it's very easy to like and enjoy – it's exceptionally neat and discreet, and relatively inexpensive too. And that's praise-worthy in a very small satellite speaker. **HFC**

Paul Messenger

MULTICHANNEL PERFORMANCE

The B&W system is not about stereo, really. The system is referred to as 'Mini Theatre' by B&W, which is a bit of a giveaway. There are three versions of Mini Theatre, and the choice swings on the subwoofer.

We compared the mid-price MT-20 system (five M-1s and an AS2 subwoofer) with the top MT-30 system (identical save for a PV1 in place of the AS2). The AS2 is a 150W square closed-box sub with a 250mm cone bass unit. And, surprise, surprise, the MT-30 is clearly better than the cheaper system, the sub filling out the sound and improving the separation along the way. The MT-20's no slouch, though; it's deep and possibly a better match for the M-1.

What both systems have is an ability to melt away the slight colorations heard in two channel. The sound is accurate if bright, and perfectly steered around the room. Both systems are also extremely fast (often, better but deeper subwoofers slow down the sound). This is principally good home cinema, but tidy multichannel audio, too. **HFC**

Alan Sircom

VERDICT

SOUND >> 70%

EASE OF DRIVE >> 70%

BUILD >> 90%

VALUE >> 85%

PRO
The M-1 is an exceptionally neat and solid satellite speaker, with an impressively even and neutral balance, and very clever and flexible mounting arrangements.

CON
Midband dynamics lack vigour, there's some coloration and congestion here, and the top end is a shade strong.

CONCLUSION
Not exactly audiophile, but a beautifully balanced and neutral combo with kickin' bass. It may be colored and congested in 2.1 mode, but the 5.1 performance focuses the listener on the positives, not the limitations, and makes a lot of sense.

HI-FI CHOICE OVERALL SCORE >> 77%